weekofyear

May 15, 2022

1 Robomind Academy

The Academy has been used for four years now. Time to show some stats.

2 Overall usage

The 'stats_weekofyear.gz' file contains usage data for all four years. The data contains only usage by students actually running Solutions to Challenges. Run-by spiders and other bots are not included.

```python
[11]: import numpy as np
      import pandas as pd
      import matplotlib.pyplot as plt

      # get the csv data
      csv = pd.read_csv("../data/csv/stats_weekofyear.csv.gz")

      # create multiindex year/week so we can use it to calculate datatime index
      mi = csv.set_index(['year','weekofyear'])

      # create new index
      from datetime import datetime
      newindex = []
      for item in mi.index:
          str = f"{item[0]} {item[1]} 0"
          t = datetime.strptime(str, "%Y %W %w")
          newindex.append(t)

      #assign new index to our csv
      dt = csv.reset_index()
      dt.index = newindex

      # drop the year/week columns
      del dt['year']
      del dt['weekofyear']
      del dt['index']

      # plot and set the dims of x
```
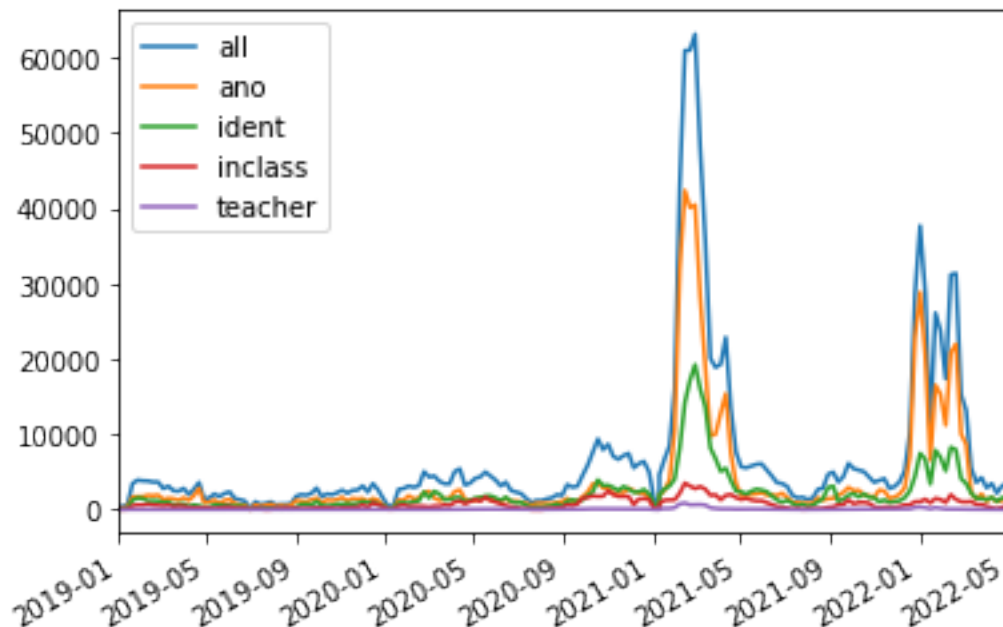
```
axes = dt.plot()
axes.set_xlim(pd.Timestamp('2019-01-01'), pd.Timestamp('2022-05-07'))
```

[11]: (17897.0, 19119.0)

The plot shows that the overall usage remains the same over all the years. These seems to be some increase in the number of identified and in-class students as opposed to anonymous users.

[12]:
```
import os
# os.system("jupyter nbconvert --to pdf --template hidecode weekofyear.ipynb")
os.system("jupyter nbconvert --to pdf weekofyear.ipynb")
```

```
[NbConvertApp] Converting notebook weekofyear.ipynb to pdf
[NbConvertApp] Support files will be in weekofyear_files/
[NbConvertApp] Making directory ./weekofyear_files
[NbConvertApp] Writing 24739 bytes to notebook.tex
[NbConvertApp] Building PDF
[NbConvertApp] Running xelatex 3 times: ['xelatex', 'notebook.tex', '-quiet']
[NbConvertApp] Running bibtex 1 time: ['bibtex', 'notebook']
[NbConvertApp] WARNING | bibtex had problems, most likely because there were no
citations
[NbConvertApp] PDF successfully created
[NbConvertApp] Writing 38752 bytes to weekofyear.pdf
```

[12]: 0